Foxford Learning Plan

Year 8

Spring 2

Relationships in Ecosystems

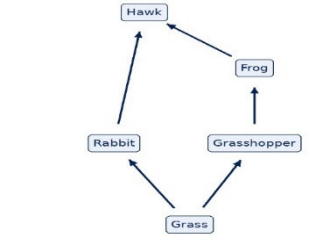
Key Vocabulary

Ecosystem	A community of organisms interacting with each other and their physical environment.
Food chain	A sequence showing how energy passes from one organism to another through feeding.
Food web	A network of connected food chains in an ecosystem.
Biomass	The mass of living material in an organism or group of organisms.
Interdependence	Organisms depending on one another for resources or services.
Predator and prey	A predator hunts and eats another animal, called its prey.
Biodiversity	The variety of living organisms in an area.
Pollution	Harmful substances or changes introduced into the environment.
Bioaccumulation	The build-up of a substance in an organism over time.
Pollination	The transfer of pollen from an anther to a stigma.
Quadrat	A frame used to sample organisms within a known area.
Transect	A line along which samples are taken to study changes across a habitat.

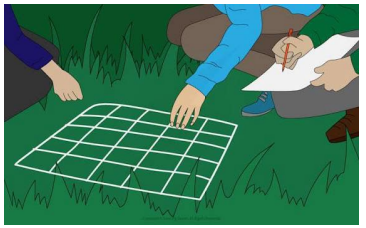
Over this course I will be able to

Key Skills

- Draw and interpret food chains and food webs, using arrows to show the direction of energy transfer.
- Interpret pyramids of biomass and predator–prey graphs, explaining patterns using evidence.
- Explain how changes to one population can affect other organisms in an ecosystem.
- Use quadrats to estimate population size and transects to investigate changes across a habitat.
- Collect and present sampling data, evaluate methods and link evidence to ecosystem processes.







I will understand

How energy passes through food chains and webs, and why less biomass is usually supported at higher feeding levels.
How organisms depend on each other, why predator–prey populations cycle and how biodiversity can support stability.
Why pollution disrupts food webs and how some persistent pollutants accumulate in organisms and along food chains.
Why pollination enables many plants to reproduce and supports crop production and food security.
How quadrats estimate populations, transects show habitat patterns and evidence links ecosystem processes together.